Physics A410: Thermal Physics

Problem Set 6

Assigned 2004 March 2
Due 2004 March 9

Show your work on all problems! Be sure to give credit to any collaborators, or outside sources used in solving the problems.

1 Schroeder 3.1

Since you don't have $S_A(U_A)$ as a continuous function, you'll have to use a discrete approximation to the derivative. There are several reasonable choices; just choose one and include an explanation justifying it.

2 Schroeder 3.5

3 Schroeder 3.8

4 Schroeder 3.10